FEE TRANSMITTAL

Application Number 10/059,564 Filing Date January 29, 2002 Inventor(s) Martin et al.

Art Unit 1616 Confirmation No. 7937

Att rne

Examiner Name Levy Attarney Docket Number WMMG 3545

[] Applicant claims small entity status.

METHOD OF PAYMENT

- [] The Commissioner is hereby authorized to charge the indicated fees to Deposit Account No. 19-1345. The Commissioner is hereby authorized to charge any under payment or credit any over payment to Deposit Account No. 19-1345.
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		FEE CALCULATION	
1.	[]	BASIC FILING, SEARCH AND EXAMINATION FEES (Type:) Subtotal (1) \$	
2.		EXCESS CLAIM FEES	
	Tota: Indep Mult:	Claims (HP) = x Fee = \$ = \$ Claims (HP) = x Fee = \$ = \$ iple Dependent Claims Fee sighest number of claims paid for)	
3.	[]	APPLICATION SIZE FEE	
	Tota:	Pages 100 = ÷ 50 = x \$250 = \$	
		Subtotal (3) \$	
4.	[X]	OTHER FEE(S)	
		month extension of time Information disclosure statement Informati	
		Subtotal (4) \$ 500.00	
TOTAL AMOUNT OF PAYMENT \$ 500.00			
Dona	nse Id G.	July 12, 2005 Leavitt, Reg. No. 17,626 Date	
Telephone: 314-231-5400			

DGL/caa

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Examiner Neil S. Levy

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Jeffrey A. Martin et al.
Serial No. 10/059,564
Filed January 29, 2002
Confirmation No. 7937
For OPTIMUM DENSITY TERMITE BAIT COMPOSITION

Art Unit 1616

July 12, 2005

NOTICE OF FILING BRIEF ON APPEAL FROM THE EXAMINER TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

- 1. Transmitted herewith is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on May 19, 2005.
 - 2. This application is on behalf of other than a small entity.
- 3. Pursuant to 37 C.F.R. 41.20(b)(2), the fee for filing the Appeal Brief is \$500.00.

If any additional fee is required, please charge to Deposit Account No. 19-1345.

Respectfully submitted,

Donald G. Leavitt, Reg. No. 17,626

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Application of Jeffrey A. Martin et al.

Art Unit 1616

Serial No. 10/059,564 Filed January 29, 2002 Confirmation No. 7937

For OPTIMUM DENSITY TERMITE BAIT COMPOSITION

Examiner Neil S. Levy

July 12, 2005

BRIEF FOR APPELLANTS

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TABLE OF CONTENTS

TABLE OF REFERENCES
I. REAL PARTY IN INTEREST
II. RELATED APPEALS AND INTERFERENCES
III. STATUS OF CLAIMS 2
IV. STATUS OF AMENDMENTS 5
V. SUMMARY OF CLAIMED SUBJECT MATTER 5
VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL
VII. ARGUMENT 7
VIII. CONCLUSION 13
IX. APPENDIX OF CLAIMS
X. APPENDIX OF EVIDENCE

TABLE OF REFERENCES

CASES

In re Tomlinson, 150 USPQ 623 (CCPA 1966)
In re Henderson, 146 USPQ 372 (CCPA 1965)
In re Antonie, 195 USPQ 6, 9 (CCPA 1977)
Heidelberger Druckmaschinen AG v. Hantscho Comm. Prods. Inc., 30 USPQ 2d 1377 (Fed. Cir. 1994)
In re Antonie, 195 USPQ 6, 8 (CCPA 1977)
In re Soni, 34 USPQ 2d 1684, 1688 (Fed. Cir. 1995)
OTHER AUTHORITIES
M.P.E.P § 716.01(B)
M.P.E.P § 716.01(a)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Jeffrey A. Martin et al. Art Unit 1616
Serial No. 10/059,564
Filed January 29, 2002
Confirmation No. 7937
For OPTIMUM DENSITY TERMITE BAIT COMPOSITION
Examiner Neil S. Levy

July 12, 2005

APPEAL BRIEF

Mail Stop Appeal Brief-Patents COMMISSIONER FOR PATENTS P.O. BOX 1450 ALEXANDRIA, VIRGINIA 22313-1450

SIR:

This brief is in furtherance of the Notice of Appeal filed in this application on May 19, 2005.

The fees required under 37 C.F.R. 41.20 are dealt with in the accompanying NOTICE OF FILING BRIEF.

I. REAL PARTY IN INTEREST

The real party of interest in this application is Whitmire Micro-Gen Research Laboratories, Inc.

II. RELATED APPEALS AND INTERFERENCES

There are no such appeals or interferences.

III. STATUS OF THE CLAIMS

A. Claims in the application are as follows:

- 1. A composition in compacted form for use for termite monitoring and control comprising a cellulose material selected from the group consisting of purified cellulose and micro-crystalline cellulose as a base bait, said composition being compacted to a density of not less than approximately 1.033 g/cc.
- 2. A composition as set forth in claim 1 wherein said composition is in the form of a tablet.
- 3. A composition as set forth in claim 1 wherein said cellulose material is purified cellulose.
- 4. A composition as set forth in claim 1 wherein said cellulose material is micro-crystalline cellulose.
- 5. A composition as set forth in claim 1 additionally containing an active ingredient for killing or controlling termites.
- 6. A composition as set forth in claim 1 additionally containing a termite attractant and/or pheromone.
- 7. A composition as set forth in claim 2 wherein said tablet has been compacted to a density of between approximately 1.033 g/cc and 1.377 g/cc.
- 8. A composition as set forth in claim 1 wherein said composition is in a compacted form selected from the group consisting of tablets, briquets and extruded forms.

- 9. A method for monitoring and controlling termite infestations comprising the steps of
- (a) preparing a composition in compacted form comprising a cellulose material selected from the group consisting of purified cellulose and microcrystalline cellulose, said composition being compacted to a density of not less than approximately 1.033 g/cc;
 - (b) placing said composition in a bait station;
- (c) monitoring said station at periodic time intervals for termites; and
- (d) upon observing termite infestation in said bait station, replacing the composition in said bait station with a bait composition containing a termite killing agent.
- 10. A method as set forth in claim 9 wherein said composition is in the form of a tablet.
- 11. A method as set forth in claim 9 wherein said cellulose material is purified cellulose.
- 12. A method as set forth in claim 9 wherein said cellulose material is microcrystalline cellulose.
- 13. A method as set forth in claim 9 wherein said composition additionally contains a termite attractant and/or pheromone.
- 14. A method as set forth in claim 9 wherein said termite killing agent is selected from the group consisting of chitin synthesis inhibitors, juvenile hormone mimics, stomach toxicants, contact insecticides and mixtures thereof.

- 15. A method as set forth in claim 10 wherein said tablet has been compacted to a density of between approximately 1.033 g/cc and 1.377 g/cc.
- 16. A method as set forth in claim 9 wherein said composition is in a compacted form selected frm the group consisting of tablets, briquets and extruded forms.
- 17. A method as set forth in claim 9 wherein said composition in compacted form is in the form of a tablet prepared by applying a tableting pressure of between approximately 516 and 1377 kg/cm².
- 18. A method as set forth in claim 14 wherein said synthesis inhibitor is selected from the group consisting of hexaflumuron, flufenoxuron, lufenuron and dimilin.
- 19. A method as set forth in claim 18 wherein said synthesis inhibitor is dimilin.
 - 20. A method for controlling termite infestations comprising the steps of
- (a) preparing a composition in compacted form comprising a cellulose material selected from the group consisting of purified cellulose and microcrystalline cellulose, said composition being compacted to a density of not less than approximately 1.033 g/cc, and a termite killing agent; and
 - (b) placing said composition in a bait station.
- 21. A method as set forth in claim 20 wherein said composition is in the form of a tablet.

- 22. A method as set forth in claim 20 wherein said cellulose material is purified cellulose.
- 23. A method as set forth in claim 20 wherein said cellulose material is microcrystalline cellulose.
- 24. A method as set forth in claim 20 wherein said termite killing agent is dimilin.

B. Status of All the Claims

- 1. Claims cancelled: None
- 2. Claims withdrawn from consideration but not cancelled: Claims 9-24 are withdrawn from further consideration pursuant to 37 C.F.R. 1.142 (b) as being drawn to a nonelected invention/species.
 - 3. Claims objected to: None
 - 4. Claims allowed or confirmed: None
 - 5. Claims rejected: Claims 1-8

C. Claims on Appeal

The claims on appeal are claims 1-8.

IV. STATUS OF AMENDMENTS

No amendments were filed after final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention, as defined in claim 1, is directed to a composition in compacted form for use for termite monitoring and control comprising a cellulose material selected from the group consisting of purified cellulose and micro-crystalline cellulose as a base bait, the composition being compacted to a density of not less than

Francisco (September 1987)

approximately 1.033 g/cc (specification page 4, lines 1-12). Through the present invention, applicants have discovered that by compacting such a composition to an optimum density of not less than approximately 1.033 g/cc, maximum loading of termite bait stations may be achieved resulting in an extension of the time period needed for monitoring and filling the bait stations (specification page 4, lines 7-17). Thus, the practice of the present invention permits substantially greater loading of monitoring and control bait into current commercially available termite bait stations than current commercial baits. The present invention thus maximizes the amount of bait which may be loaded into a termite bait station by reason of being compacted to an optimum density of not less than 1.033 g/cc.

Claims 2-8 are each dependent upon claim 1 and define further features of the present invention such as the specific form of the composition (i.e., tablet in claim 2), the specific nature of the cellulose material (claims 3 and 4) and the preferred range of densities to which the composition is compacted (i.e. between 1.033 g/cc and 1.377 g/cc in claim 7).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 2, 4-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Richardson et al. U.S. Patent No. 6,416,752. In connection with this ground of rejection, the examiner states that "tablets, or granular forms - the instant claim 2 or 8, briquet or extruded, as granule is specified although density is left for one in the art to determine" and further that "if one is so desiring, would be able with minimal testing find suitable tablet density to be >1, or approximating 1.033 g/cc, as instantly claimed".

Claims 1-8 are also rejected under 35 U.S.C. 103(a) as being unpatentable over the Richardson et al. '752 patent in view of Minagawa et al. U.S. Patent No. 5,096,710. In connection with this ground of rejection, the examiner states that Richardson et al. compresses and tablets the instant termite bait but does not explicitly state compression strength and that Minagawa et al. utilizes the Richardson et al. bait "and

does show compression force to be inclusive of the instant range as claimed". The examiner further states that no distinction is seen between "applicants' argued for compacting and Richardson's compressing or achieving a tablet form" and that the "500 kg/cm² of Minagawa" is seen as achieving the instant required approximately 1.033 g/cc. In the earlier Office action of June 11, 2004, the examiner had emphasized that applicants had not provided "any objective evidence of criticality nonobvious or unexpected results.

VII. ARGUMENT

1. Claims 1, 2, 4-6 and 8 are submitted to define subject matter which is nonobvious over the Richardson et al. reference and therefore patentable under 35 U.S.C. 103(a).

The Richardson et al. '752 patent is directed to an improved termite bait composition comprising a powdered cellulose attractant having a particle size in the range of approximately 1 to 100 micrometers and a termite killing agent. Richardson et al. (col. 2, lines 65-67) discloses that the termite bait composition may be compressed into tablets, but as acknowledged by the examiner fails to provide any information as to the density to be achieved or the degree of compaction required to obtain the advantages realized through the present invention. The Richardson et al. disclosure contains no mention of optimization in any form, nor does it recognize density as a result effective variable.

The examiner's assertion that "clearly one if one is so desiring, would be able with minimal testing find suitable tablet density to be >1 or approximately 1.033 gl/cc" is a statement that it would be "obvious to try" experiments which would result in the claimed invention. It is well settled that the "obvious to try" test is not the standard to be applied under 35 U.S.C.103. *In re Tomlinson*, 150 USPQ 623 (CCPA 1966); *In re Henderson*, 146 USPQ 372 (CCPA 1965).

Thus, the Richardson et al. reference is devoid of any teaching or suggestion that a termite bait composition could be desirably compacted to a density of

not less than approximately 1.033 g/cc. There is no basis in Richardson et al. to support the examiner's speculative contention that one so desiring would be able with minimal testing to find a suitable tablet density of >1 g/cc as instantly claimed. Where in Richardson et al. is found any suggestion that the matter of density should be investigated, much less that the density is a result effective variable and the density of not less than approximately 1.033 g/cc is optimum? As held in *In re Antonie*, 195 USPQ 6, 9 (CCPA 1977), if the parameter to be optimized was not recognized to be a result effective variable, as is the case with the parameter of density in the instant situation, then it is nonobvious.

Accordingly, claims 1, 2, 4-6 and 8 are submitted to be manifestly nonobvious over the Richardson et al. reference under 35 U.S.C. 103(a).

2. Claims 1-8 are submitted to define nonobvious subject matter over the Richardson et al. reference in view of the Minagawa et al. reference under 35 U.S.C. 103(a).

The disclosure of the Richardson et al. reference has been discussed above, it being conceded by the examiner that it does not disclose compression strength. The Minagawa et al. reference discloses (col. 4, lines 8-18) the preparation of poison bait compositions by mixing one or more insect-growth controlling agents with dextrin, plant oil and a feeding attractant to make a uniform mixture which is then tableted by a per se conventional procedure to give a bait composition in a tablet of desired size normally under a pressure of about 10 to about 500 kg/cm². These tableting pressures expressly stated by Minagawa et al. are much lower than the pressures of between 516 and 1377 kg/cm² used in Example 1 of the present application and capable of producing compacted compositions having a density between approximately 1.033 g/cc and 1.377 g/cc as defined in claim 7 of the present application. By any fair reading of Minagawa et al., there is no basis for the examiner's statement that Minagawa et al. shows a "compressive force to be inclusive of the instant range as claimed". Moreover, the examiner's contention that the 500 kg/cm² of

Minagawa et al. achieves the instant required approximately 1.033 g/cc assumes that one reading the Minagawa et al. teaching would somehow be led to investigate the parameter of density as a result effective variable. It is submitted that there is no teaching or suggestion in Minagawa et al. on the basis of which one skilled in the art would be encouraged to investigate density as a means of achieving the improved results flowing from the present invention or would be led to discover the optimum density which underlies the present invention.

The examiner also combines the Richardson et al. and Minagawa et al. references in an effort to show that the claimed invention herein is obvious within the meaning of 35 U.S.C. 103(a). Thus, the examiner contends that reading Minagawa et al. as a whole and finding the compositions of Richardson et al. as explained and expanded by Minagawa et al. in regard to termites provides prima facie obviousness over the instant baits. As previously emphasized, Richardson et al. do not disclose or suggest any specific compression data and the tableting pressures taught by Minagawa et al. are much lower than the pressures of not less than 516 kg/cm² used in the present invention. Further, there is nothing in either Richardson et al. or Minagawa et al. to suggest that these references be combined in any way. As held in *Heidelberger Druckmaschinen AG v. Hantscho Comm. Prods. Inc.*, 30 USPQ 2d 1377 (Fed. Cir. 1994), there must be something in the prior art as a whole to suggest the desirability and thus the obviousness of making the combination of references. It is submitted that any such suggestion is wholly lacking in the present situation.

Claims 1-8 are therefore submitted to be patentable under 35 U.S.C. 103(a) over the Richardson et al. reference in view of the Minagawa et al. reference.

3. The Examiner erred in not considering the Declarations of Dr. Brian T. Forschler and Ronald O. Richardson or in failing to accord proper weight to the showings of these Declarations.

During the prosecution of this application in the Office action of June 11, 2004, the examiner stated that applicants had not provided "any objective evidence of

criticality, non-obvious or unexpected results that the administration of the particular ingredients or concentrations provides any greater or different level of prior art expectation as claimed". In response to this stated position by the examiner, applicants filed Declarations under Rule 1.132 by Dr. Brian T. Forschler and Mr. Ronald O. Richardson.

The Declaration of Dr. Forschler was directed to the issue of obviousness. As shown by his curriculum vitae, Dr. Forschler is a highly qualified entomologist who has conducted research in the filed of entomology for many years. In paragraph 2 of his Declaration, there is set forth the details of a wagon wheel choice test carried out by Dr. Forschler to determine the feeding difference in feeding termites three different baits, i.e. pine wood, powdered cellulose and a compressed cellulose bait matrix prepared in accordance with the present invention, the latter having a density of 1.1 g/cc. In this choice test, the three different test materials were placed in different, separate arenas, the pine wood in one container, the loose powdered cellulose in a second container and the compressed cellulose tablet of this invention in a third container. Each of these containers was then attached to a central container by means of tubing. Termites were released into the central container and could freely choose which of the other three containers they wish to visit and the food material they want to feed on. Attached to Dr. Forschler's Declaration is a graph illustrating the test results and the feeding difference between the different test materials. As can be seen, the compressed cellulose tablet of the present invention was highly preferred by the termites over the other two choices. These results are respectfully submitted to be unexpectedly good and beyond what one skilled in the art would expect from compacting a termite bait composition to a density of not less than approximately 1.033 g/cc.

Referring now to the Declaration of Ronald O. Richardson, and more specifically to paragraph 3 of his Declaration and the attached brochure which includes Fig. 1 and Fig. 3 photographs showing three tablets in a tube or cartridge, these tablets having been prepared in accordance with the present invention and containing a total of

at least 93 grams of a bait composition as defined in claim 1 of this application. If a non-compacted bait composition were used, it would only require 30 grams to fill the same tube or cartridge. This data from Mr. Richardson's Declaration thus establishes that the present invention maximizes the amount of bait which may be loaded into a termite bait station by reason of being compacted to an optimum density of not less than 1.033 g/cc.

Based upon the final rejection as set forth in the Office action of February 25, 2005, the examiner either ignored both of the above-discussed Declarations or accorded them little or no weight on the issue of obviousness.

According to Section 7.16 of the Manual of Patent Examining Procedure:

"It is the responsibility of the primary examiner to personally review and decide whether affidavits or declarations submitted under 37 C.F.R. 1.132 for the purpose of traversing grounds of rejection are responsive to the rejection and present sufficient facts to overcome the rejection."

Further, under Section 716.01(B) of the MPEP:

"Evidence traversing rejections must be considered by the examiner whenever present."

and also under Section 716.01(a) of the MPEP:

"Affidavits or declarations containing evidence of criticality or unexpected results......must be considered by the examiner in determining the issue of obviousness of claims for patentability under 35 U.S.C. 103" (Emphasis added).

It is respectfully submitted that the examiner has failed to give adequate consideration to the Declaration of Dr. Forschler and Mr. Richardson and that when adequate consideration is given to these Declarations they will be found to establish

substantially improved results through the practice of the present invention and that such results are unexpected. As held in *In re Antonie*, 1995 USPQ 6, 8 (CCPA 1977), patentability may be imparted if the results achieved at the designated concentrations are "unexpectedly good". Further, under the authority of *In re Soni*, 34 USPQ 2d 1684, 1688 (Fed. Cir. 1995):

"When an applicant demonstrates substantially improved results, as Soni did here, and states that the results were unexpected, this should suffice to establish unexpected results in the absence of evidence to the contrary."

Accordingly, giving adequate weight to the showing made in the Declarations of Dr. Forschler and Mr. Richardson, it is respectfully submitted that claims 1-8 are clearly nonobvious over Richardson et al. or Richardson et al. in view of Minagawa et al. under 35 U.S.C. 103.

VIII. CONCLUSION

Based upon the foregoing authorities and arguments, the Board is respectfully requested to reverse the rejection of claims 1-8 on the grounds set forth in the final rejection of February 25, 2005 and to allow these claims as defining nonobvious subject matter under 35 U.S.C. 103.

Submitted herewith is the requisite fee in the amount of \$500.00 for the Appeal Brief filing fee. The Commissioner is hereby authorized to charge any underpayment and credit any overpayment of government fees to Deposit Account No. 19-1345.

Respectfully submitted,

Donald G. Leavitt, Reg. No. 17,626

and G. Leavier

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DGL/vlm/caa *Enclosures

IX. APPENDIX OF CLAIMS ON APPEAL

- 1. A composition in compacted form for use for termite monitoring and control comprising a cellulose material selected from the group consisting of purified cellulose and micro-crystalline cellulose as a base bait, said composition being compacted to a density of not less than approximately 1.033 g/cc.
- 2. A composition as set forth in claim 1 wherein said composition is in the form of a tablet.
- 3. A composition as set forth in claim 1 wherein said cellulose material is purified cellulose.
- 4. A composition as set forth in claim 1 wherein said cellulose material is micro-crystalline cellulose.
- 5. A composition as set forth in claim 1 additionally containing an active ingredient for killing or controlling termites.
- 6. A composition as set forth in claim 1 additionally containing a termite attractant and/or pheromone.
- 7. A composition as set forth in claim 2 wherein said tablet has been compacted to a density of between approximately 1.033 g/cc and 1.377 g/cc.
- 8. A composition as set forth in claim 1 wherein said composition is in a compacted form selected from the group consisting of tablets, briquets and extruded forms.

X. APPENDIX OF EVIDENCE

Attached are the Declarations of Dr. Brian T. Forschler and Ronald O. Richardson (together with attachments) referred to in the Brief for Applicants.